

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claims 1 – 75 cancelled.

76. (previously presented) An endovascular prosthesis comprising:

A trunk portion having a first end, a second end, and a trunk lumen extending between said first end and said second end of said trunk portion, said trunk portion including a radially expandable support, an inner layer of fabric which at least partially defines an outer side of said trunk portion, said radially expandable support being at least partially disposed between said inner and outer layers of fabric; and

a furcated portion connected to said second end of said trunk portion, said furcated portion including at least two branches extending from an intersection of said furcated portion and having branch lumens in fluid communication with said trunk lumen, said inner layer of fabric at least partially defines said branch lumens.

77. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said inner and outer layers of fabric have uniaxially oriented fibril microstructures.

78. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein each of said inner and outer layers has a thickness of about 0.1 mm.

79. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said inner and outer layers are interconnected by sintering to form a substantially monolithic covering for at least a portion of said radially expandable support.

80. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said trunk portion is formed by a number of sections equal to the number of branches in said furcated portion, said sections of said trunk portion being interconnected by a plurality of seams which extend between said first and second ends of said trunk portion.

81. (previously presented) An endovascular prosthesis as set forth in claim 76 further including at least two outflow limbs each of which extends from one of said branches and has a limb lumen in fluid communication with said trunk lumen, each of said outflow limbs having a radially expandable limb support, an inner layer of fabric which at least partially defines said limb lumen, and an outer layer of fabric which at least partially defines an outer side of said limb, said radially expandable limb support of each one of said outflow limbs being at least partially disposed between said inner and outer layers of fabric of said one outflow limb.

82. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said radially expandable support includes a plurality of radially expandable stents which are disposed in said trunk portion between said inner and outer layers of fabric.

83. (previously presented) An endovascular prosthesis as set forth in claim 76 further including a stent extending from said first end of said trunk portion with at least a portion of said stent spaced from said inner and outer layers of fabric, said stent having surfaces which engage an inner side surface of a first blood vessel at a location in an upstream blood flow direction of a junction between said first blood vessel and a second blood vessel, said stent extends downstream past the junction between said first and second blood vessels, said trunk portion being disposed in a downstream blood flow direction of the junction between said first and second blood vessels.

84. (previously presented) An endovascular prosthesis as set forth in claim 76 further including a plurality of sutures connected with said branches, each of said sutures being connected with an end portion of one of said branches and extending from said end portion of said one of said branches in a direction away from said trunk portion.

85. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said radially expandable support is spaced apart from said furcated portion.

86. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said outer layer of fabric at least partially defines outer sides of said branches.

87. (previously presented) An endovascular prosthesis as set forth in claim 86 each one of said branches includes a rod which extends from a location adjacent to said intersection of said furcated portion to a location adjacent to an

end of said one branch which is spaced from said intersection, said rod being disposed between said inner and outer layers of fabric.

88. (previously presented) An endovascular prosthesis as set forth in claim 76 wherein said inner and outer layers of fabric extend from said first end of said trunk portion to ends of said branches which are spaced furthest from said trunk portion.

89. (previously presented) An endovascular prosthesis as set forth in claim 88 wherein said inner and outer layers of fabric are bonded together.

90. (previously presented) an endovascular prosthesis as set forth in claim 76 wherein said inner layer of fabric is coextensive with said outer layer of fabric.

Claims 91 – 95 cancelled.

96. (previously presented) An endovascular prosthesis comprising:
a trunk portion having a first end portion disposed in engagement with an inner side surface of a first blood vessel at a location in an upstream blood flow direction from an aneurysm, a second end, and a trunk lumen extending between said first end and said second end of said trunk portion,

a furcated portion connected to said second end of said trunk portion, said furcated portion including at least four branches which are at least partially disposed in the aneurysm, each of said branches having a first end connected with said trunk portion and a second end disposed in the aneurysm, each of said branches having a branch lumen in fluid communication with said trunk lumen, and

at least four outflow limbs, each of said at least four outflow limbs having a first end connected with one of said branches at a location disposed in the aneurysm, each of said at least four outflow limbs includes a second end which is spaced from the aneurysm, each of said at least four outflow limbs having a limb lumen in fluid communication with said trunk lumen,

a first one of said at least four outflow limbs extends from the aneurysm into a first common blood vessel and from the first common blood vessel into a first branch blood vessel, the second end of said first one of said outflow limbs is disposed in the first branch blood vessel,

a second one of said at least four outflow limbs extends from the aneurysm into the first common blood vessel and from the first common blood vessel into a second branch blood vessel, the second end of said second one of said outflow limbs is disposed in the second branch blood vessel,

a third one of said at least four outflow limbs extends from the aneurysm into a second common blood vessel and from the second common blood vessel into a third branch blood vessel, the second end of said third one of said outflow limbs is disposed in the third branch blood vessel,

a fourth one of said at least four outflow limbs extends from the aneurysm into the second common blood vessel and from the second common blood vessel into a fourth branch blood vessel, the second end of said fourth one of said outflow limbs is disposed in the fourth branch blood vessel.

97. (previously presented) An endovascular prosthesis as set forth in claim 96 further including a stent having surfaces which engage the inner side

surface of the first blood vessel at a location in the upstream blood flow direction from the aneurysm and from a junction between said first blood vessel and a second blood vessel, said stent having anchor portions which pierce the inner side surface of the first blood vessel at locations in the upstream blood flow direction from the junction between the first and second blood vessels, said stent is connected with said trunk portion at a location in a downstream blood flow direction from the junction between the first and second blood vessels.

98. (previously presented) An endovascular prosthesis as set forth in claim 96 wherein said first one of said outflow limbs has an outer side surface which engages an outer side surface of said second one of said outflow limbs in first common blood vessel, said third one of said outflow limbs has an outer side surface which engages an outer side surface of said fourth one of said outflow limbs in said second common blood vessel.

99. (previously presented) An endovascular prosthesis as set forth in claim 96 wherein said trunk portion includes a radially expandable support, an inner layer of fabric which at least partially defines said trunk lumen, and an outer layer of fabric which at least partially defines an outer side of said trunk portion, said radially expandable support being at least partially disposed between said inner and outer layers of fabric, said inner layer of fabric at least partially defines said branch lumens, said outer layer of fabric at least partially defines outer sides of said branches.

100. (previously presented) An endovascular prosthesis as set forth in claim 99 wherein each one of said outflow limbs of said at least four outflow limbs

includes a radially expandable limb support, an inner layer of fabric which at least partially defines said limb lumen in said one of said outflow limbs, and an outer layer of fabric which at least partially defines an outer side of said one of said outflow limbs, said limb support being disposed between said inner and outer layers of fabric of said one of said outflow limbs.

101. (new) An endovascular prosthesis comprising:

a trunk portion having a first end, a second end, and a trunk lumen extending between said first end and said second end of said trunk portion, said trunk portion including a radially expandable support, an inner layer of fabric which at least partially defines said trunk lumen, and an outer layer of fabric which at least partially defines an outer side of said trunk portion, said radially expandable support being at least partially disposed between said inner and outer layers of fabric;

a furcated portion connected to said second end of said trunk portion, said furcated portion including at least two branches extending from an intersection of said furcated portion and having branch lumens in fluid communication with said trunk lumen, said inner layer of fabric at least partially defines said branch lumens, said outer layer of fabric at least partially defines outer sides of said branch lumens;

said trunk portion is formed by a number of sections equal to the number of branches in said furcated portion, said sections of said trunk portion being interconnected by a plurality of seams which interconnect said inner and outer layers of fabric and which extend between said first and second ends of said

trunk portion, said inner and outer layers of fabric extend from said first end of said trunk portion to ends of said branches which are spaced furthest from said trunk portion; and

a plurality of outflow limbs each of which extends from one of said branches and has a limb lumen in fluid communication with said trunk lumen, each of said outflow limbs having a radially expandable limb support, an inner layer of fabric which at least partially defines said limb lumen, and an outer layer of fabric which at least partially defines an outer side of said limb, said radially expandable limb support of each one of said outflow limbs being at least partially disposed between said inner and outer layers of fabric of said one outflow limb.

102. (new) An endovascular prosthesis as set forth in claim 101 wherein said inner and outer layers of fabric are bonded together.

103. (new) An endovascular prosthesis as set forth in claim 76 wherein said inner and outer layers of fabric have uniaxially oriented fibril microstructures and each of said inner and outer layers has a thickness of about 0.1 mm.